



PTO/SB/08a/b (08-03)  
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Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/765,911
				Filing Date	January 29, 2004
				First Named Inventor	Kristy A. Campbell
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	3	Attorney Docket Number	M4065.0937/P937

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code <sup>2</sup> (if known)				
TJN	AA	US-6,218,718	4/2001	Gregg et al.		
	AB	US-6,304,481	10/2001	Hurt		
	AC	US-6,061,265	5/2000	Hannah		
	AD	US-5,530,263	6/1996	DiVincenzo		
	AE	US-6,052,519	4/2000	Gates et al.		
FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. <sup>7</sup>

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T <sup>2</sup>
TJN	CA	A. E. BOTHA et al.; "Electron-spin polarization in symmetric type-II quantum wells from bulk inversion asymmetry" The American Physical Society, Physical Review B67, 195334 pp. 1-8 (2003).				
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	CD	L. B. GLEBOV, et al.; "Magneto-induced microwave conductivity in Mn <sup>2+</sup> - doped silicate glass" Journal of Non-Crystalline Solids 265, pp. 181-184, (2000).				
	CE	O. KAHN, et al.; "Spin-Transition Polymers: From Molecular Materials Toward Memory Devices", Science, Vol. 279, pp. 44-48 (January 2, 1998).				
	CF	FATIH KOCER, et al.; "A New Approach In NanoScale Electronics: Spin-FET (Field Effect Transistor) and Spin-Based Memory Architectures," < <a href="http://www.personal.engine.unich.edu/w/pualized/spin.pdf">www.personal.engine.unich.edu/w/pualized/spin.pdf</a> > (accessed prior to 1/29/04).				
	CG	YUJI KUBO, et al.; "Chirality-Transfer Control Using a Heterotopic Zinc (II) Porphyrin Dimer," J. Am. Chem. Soc. 123, pp. 12700-12701, (2001).				
	CH	Physics Laboratory, "Fourier-Transform Microwave Spectroscopy for Chemical Analysis," < <a href="http://physics.nist.gov/Divisions/Div844/facilities/ftmw/ftmw.html">http://physics.nist.gov/Divisions/Div844/facilities/ftmw/ftmw.html</a> > (accessed 2/24/2003).				
TJN	CI	QILIANG LI; "Capacitance and conductance characterization of ferrocene-containing self-assembled monolayers on silicon surfaces for memory applications," Applied Physics Letters, Volume 81, Number 8, pp. 1494-1496, (August 19, 2002).				



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Sheet	2	of	3		

177	CJ	PAUL A. LIDDELL, et al.; "Photonic Switching of Photoinduced Electron Transfer in a Dithienylethene-Porphyrin-fullerene Triad Molecule," J. Am. Chem. Soc. 124, pp. 7668-7669, (2002).	
	CK	S.E. LOFLAND, et al.; "Giant microwave magneto-impedance in a single crystal of $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ : The effect of ferromagnetic antiresonance," J. Appl. Phys. 80(6), pp. 3592-3594, (September 15, 1996).	
	CL	S. LUDWIG, et al.; "Direct Coupling of Magnetic Fields to Tunneling Systems in Glasses," Physical Review Letters, Volume 88, Number 7, pp. 075501-1-4, (February 18, 2002).	
	CM	J.A. MAJEWSKI, et al.; "First principles study of spin-electronics: Zero-field spin-splitting in superlattices," <www.wsi.tu-muenchen.de/research/annual_reports/rep00/pdfs/24.pdf> (accessed prior to 1/29/04).	
	CN	IAN J. McNAUGHT, et al.; "Microwave Spectroscopy Tutor," <http://jchemed.chem.wisc.edu/JCESoft/Issues/Series_B/8B2/prog2-8B2.html> (accessed 2/24/2003).	
	CO	A.N. Medina, et al.; "Resonant microwave cavity response of amorphous ribbons," J. Appl. Phys. 79(8), pp. 5462-64, (April 15, 1996).	
	CP	RYO MIYAMOTO, et al.; "Interplanar interactions in the triplet dimmers of Zn and metal free complexes of crowned porphyrin and phthalocyanine studied by time-resolved electron paramagnetic resonance," Coordination Chemistry Reviews, 132, pp. 57-62, (1994).	
	CQ	P. GIRI PRAKASH, et al.; "EPR and optical absorption studies of $\text{Mn}^{2+}$ ions in alkali borotellurite glasses," Modern Physics Letters B, Vol. 16, Nos. 5 & 6, pp. 143-159, World Scientific Publishing Company, (2002).	
	CR	R.R. RAKHIMOV, et al.; "Microwave response near zero magnetic field in transition-metal-doped silicate glasses," Applied Physics Letters, Volume 76, Number 6, pp. 751-753, (February 7, 2000).	
	CS	JOHN ROBBLEE; "Electron Paramagnetic Resonance" Berkeley Spectroscopy Club, <http://spectroscopy.161.gov/EPR-Robblee.pdf> (accessed April 18, 2001).	
	CT	M.A. ROWE, et al.; "A Hyperfine Measurement in Laser Trapped Radioactive $^{21}\text{Na}$ ," <http://weak0.physics.berkeley.edu/weakint/annual.reports/1997/21Na.NSD1997.pdf> (accessed prior to 1/29/04).	
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	CV	SUNG IK YANG et al.; "Interplay of Orbital Tuning and Linker Location in Controlling Electronic Communication in Porphyrin Arrays," American Chemical Society, pp. 4008-18, (1999).	
	CW	DAE HWAN YOON, et al.; "Electrical Conduction through Linear Porphyrin Arrays," J. Am. Chem. Soc. 125, pp. 11062-11064, (August 15, 2003).	
	CX	Chemedu, "Crystal Field Theory" <http://chemed.chem.purdue.edu/genchem/topicreview/bp/ch12/crystal.html>, (accessed 6/23/2003).	
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	CA1	"ESR Spectroscopy", <http://www.mlib.cnr.it/marble/esr.html> (accessed 7/16/2003).	
	CB1	Frontier Scientific, "Porphyrins," Frontier Scientific, <http://www.frontiersci.com/porphyrins.html> (accessed 11/15/2003).	
177	CC1	Net BioChem, "Porphyrins" HemeandIron, <http://www.porphyrin.net/Heme_iron/porphyrins/porphymain.html> (accessed 11/15/2003).	



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				First Named Inventor	Kristy A. Campbell
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	M4065.0937/P937
Sheet	3	of	3		

CD1	U. WA, "Section 4: Metal-Ligand Interactions and "Reactions of Coordinated Ligands," < <a href="http://www.chem.uwa.edu.au/enrolled_students/2nd_year_Chem_Inorg_Section/sect4/sect.4">http://www.chem.uwa.edu.au/enrolled_students/2nd_year_Chem_Inorg_Section/sect4/sect.4</a> > (accessed 6/23/2003).
CE1	Univ. Arizona, "Microwave Spectroscopy," < <a href="http://www.chem.arizona.edu/faculty/kuko/research/mwspec/spectra/spectra.htm">http://www.chem.arizona.edu/faculty/kuko/research/mwspec/spectra/spectra.htm</a> > (accessed 2/24/2003).
CF1	BioChem, "The Mineral Perovskite," < <a href="http://mineral.galleries.com/minerals/oxides/perovvski/perovvski.htm">http://mineral.galleries.com/minerals/oxides/perovvski/perovvski.htm</a> > (accessed 11/15/2003).
CG1	BioChem, "Spin-Spin Interaction," < <a href="http://biochem.unl.edu/ragsdale/EPRspectroscopy/sld032.html">http://biochem.unl.edu/ragsdale/EPRspectroscopy/sld032.html</a> > (accessed 7/16/2003).
CH1	U. Alabama, < <a href="http://bama.ua.edu/Kshaughn/ch609/notes/3-legal_survey">http://bama.ua.edu/Kshaughn/ch609/notes/3-legal_survey</a> > (accessed prior to 1/29/04).

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Examiner Signature		Date Considered	10/24/05
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet	1	of	3	Attorney Docket Number	M4065.0937/P937
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**Complete if Known**

Application Number	10/765,911-Conf. #2647
Filing Date	January 29, 2004
First Named Inventor	Kristy A. Campbell
Art Unit	2818
Examiner Name	Not Yet Assigned

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
TIN	A	US 2004/0035401	2/2004	Ramachandran et al.	
	B	US 2003/0212724	11/2003	Ovshinsky et al.	
	C	US 2003/0048744	3/2003	Ovshinsky et al.	
	D	US 2003/0212725	11/2003	Ovshinsky et al.	
	E	US RE 37,259E	7/2001	Ovshinsky	
	F	US 3,271,591	9/1966	Ovshinsky	
	G	US 3,961,314	6/1976	Klose et al.	
	H	US 3,966,317	6/1976	Wacks et al.	
	I	US 3,983,542	11/1976	Ovshinsky	
	J	US 3,988,720	10/1976	Ovshinsky	
	K	US 4,177,474	12/1979	Ovshinsky	
	L	US 4,267,261	5/1981	Hallman et al.	
	M	US 4,597,162	7/1986	Johnson et al.	
	N	US 4,608,296	8/1986	Keem et al.	
	O	US 4,637,895	1/1987	Ovshinsky et al.	
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	Q	US 4,664,939	5/1987	Ovshinsky	
	R	US 4,668,968	5/1987	Ovshinsky et al.	
	S	US 4,670,763	6/1987	Ovshinsky et al.	
	T	US 4,673,957	6/1987	Ovshinsky et al.	
	U	US 4,678,679	7/1987	Ovshinsky	
	V	US 4,696,758	9/1987	Ovshinsky et al.	
	W	US 4,698,234	10/1987	Ovshinsky et al.	
	X	US 4,710,899	12/1987	Young et al.	
	Y	US 4,728,406	3/1988	Banerjee et al.	
	Z	US 4,737,379	4/1988	Hudgens et al.	
	A1	US 4,766,471	8/1988	Ovshinsky et al.	
	B1	US 4,769,338	9/1988	Ovshinsky et al.	
	C1	US 4,775,425	10/1988	Guha et al.	
	D1	US 4,788,594	11/1988	Ovshinsky et al.	
	E1	US 4,809,044	2/1989	Pryor et al.	
	F1	US 4,818,717	4/1989	Johnson et al.	
	G1	US 4,843,443	6/1989	Ovshinsky et al.	
	H1	US 4,845,533	7/1989	Pryor et al.	
	I1	US 4,853,785	8/1989	Ovshinsky et al.	
	J1	US 4,891,330	1/1990	Guha et al.	
	K1	US 5,128,099	7/1992	Strand et al.	
	L1	US 5,159,661	10/1992	Ovshinsky et al.	
	M1	US 5,166,758	11/1992	Ovshinsky et al.	
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TD	Q1	US 5,359,205	10/1994	Ovshinsky	
	R1	US 5,341,328	8/1994	Ovshinsky et al.	
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	W1	US 5,536,947	7/1996	Klersy et al.	
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	J2	US 6,339,544	1/2002	Chiang et al.	
	K2	US 6,404,665	6/2002	Lowery et al.	
	L2	US 6,429,064	8/2002	Wicker	
	M2	US 6,437,383	8/2002	Xu	
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	P2	US 6,487,113	11/2002	Park et al.	
	Q2	US 6,501,111	12/2002	Lowery	
	R2	US 6,507,061	1/2003	Hudgens et al.	
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	U2	US 6,512,241	1/2003	Lai	
	V2	US 6,514,805	2/2003	Xu et al.	
	W2	US 6,531,373	3/2003	Gill et al.	
	X2	US 6,534,781	3/2003	Dennison	
	Y2	US 6,545,287	4/2003	Chiang	
	Z2	US 6,545,907	4/2003	Lowery et al.	
	A3	US 6,555,860	4/2003	Lowery et al.	
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	C3	US 6,566,700	5/2003	Xu	
	D3	US 6,567,293	5/2003	Lowery et al.	
	E3	US 6,569,705	5/2003	Chiang et al.	
	F3	US 6,570,784	5/2003	Lowery	
	G3	US 6,576,921	6/2003	Lowery	
	H3	US 6,586,761	7/2003	Lowery	
TD	I3	US 6,589,714	7/2003	Maimon et al.	

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TTA	J3	US 6,590,807	7/2003	Lowery	
	K3	US 6,593,176	7/2003	Dennison	
	L3	US 6,597,009	7/2003	Wicker	
	M3	US 6,605,527	8/2003	Dennison et al.	
	N3	US 6,613,604	9/2003	Maimon et al.	
	O3	US 6,621,095	9/2003	Chiang et al.	
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	Q3	US 6,642,102	11/2003	Xu	
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	T3	US 6,667,900	12/2003	Lowery et al.	
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	X3	US 6,674,115	1/2004	Hudgens et al.	
	Y3	US 6,687,427	2/2004	Ramalingam et al.	
	Z3	US 6,690,026	2/2004	Peterson	
	A4	US 6,696,355	2/2004	Dennison	
	B4	US 6,687,153	2/2004	Lowery	
	C4	US 6,707,712	3/2004	Lowery	
TD	D4	US 6,714,954	3/2004	Ovshinsky et al.	

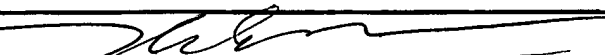
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